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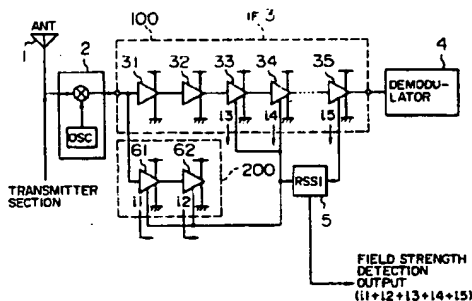
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(54) Radio communication apparatus with circuit for field strength determination

(57) Part of a first signal path (100) for amplifying a signal includes circuits (33b, 34b) for detecting a signal, and a second signal path (200) connected to an input portion of the first signal path includes circuits (61b, 62b) for detecting the signal. A signal strength detector circuit (5) adds outputs from the respective detector circuits in the first and second signal paths. The first signal path has a function of expanding the dynamic range in a

smaller signal region as compared with the second signal path, while the second signal path has a function of expanding the dynamic range in a larger signal region as compared with the first signal path. When a radio transmitted output is variably controlled in a radio transmitter section (TX) based on a field strength detection output for a received signal, the transmitted output is optimized, resulting in minimizing consumed power and unnecessary radiation of radio waves.

FIG. 3



## EUROPEAN SEARCH REPORT

Application Number  
EP 94 30 6095

**DOCUMENTS CONSIDERED TO BE RELEVANT**

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (INCL.6)
X	EP 0 343 569 A (NOKIA MOBIRA OY) 29 November 1989	1,2,8, 12,13	H04B17/00 H04B7/005 H03G7/00
Y	* the whole document *	1,2,4,6, 7,9,14, 15	
A	---	3,5,11, 16	
X	US 5 129 098 A (MCGIRR ANDREW E ET AL) 7 July 1992	14,19	
Y	* abstract; claim 1 *	1,2,6, 14,15,18	
A	* column 5, line 20 - line 44 *	17	
X	EP 0 530 165 A (ERICSSON TELEFON AB L M) 3 March 1993	14,19	
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	* column 7, line 12 - line 17 *		
	* column 7, line 30 - line 49; figures 1,2 *		
Y	EP 0 517 305 A (PHILIPS NV) 9 December 1992	1,2,4	TECHNICAL FIELDS SEARCHED (INCL.6) H04B H03G
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	* column 6, line 5 - line 12; figure 2 *		
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 September 1998	Examiner Harris, E
CATEGORY OF CITED DOCUMENTS		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons A: technological background O: non-written disclosure P: intermediate document	
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		A: member of the same patent family, corresponding document	

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (INCL.6)
A	<p>EP 0 248 428 A (NIPPON ELECTRIC CO) 9 December 1987 * abstract * * page 2, line 4-12 * * page 8, line 52 - line 57 * * page 9, line 31 - line 33 * * page 10, line 34 - line 35; figure 9 *</p> <p>-----</p>	3, 10, 16, 17	
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The present search report has been drawn up for all claims			
Place of search: <b>THE HAGUE</b>		Date of completion of the search: <b>9 September 1998</b>	Examiner: <b>Harris, E</b>
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background C : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>..... &amp; : member of the same patent family, corresponding document</p>			

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